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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/552,822

10/06/2005

Rolf Metzger

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03/31/2008

K.F. ROSS P.C.

5683 RIVERDALE AVENUE

SUITE 203 BOX 900

BRONX, NY 10471-0900

EXAMINER

LAMB, BRENDA A

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/552,822	Applicant(s) METZGER ET AL.	
	Examiner Brenda A. Lamb	Art Unit 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10/6/2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 9-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 9 and 14-17 is/are rejected.
- 7) ☒ Claim(s) 10-13 and 18-20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
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| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/6/2005</u> . | 6) <input type="checkbox"/> Other: _____ |

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 9 and 14-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ridley 4,135,477 in view Kamitani 6,146,708.

Ridley teaches the design of a curtain coating die apparatus for applying a coating liquid to a web moving in a travel direction, the apparatus comprising: a hopper defining a distribution chamber extending transversely of the direction, a flow face extending generally in and transverse to the web-travel direction, a slot extending

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between the chamber and the flow face and elongated transversely of the direction; means for supplying the coating liquid to the chamber, thence through the slot to the flow face, and thence along the flow face and for dropping the liquid as a transversely extending and downwardly flowing curtain from an edge of the flow face onto the web; and a pair of transversely spaced edge guides having upper guide elements having transversely confronting faces and fittable complementarily to the flow face, the upper guide elements lying in a use position substantially directly on the flow face to limit liquid flow to a region thereon defined between the transversely confronting faces that hence define the width of the curtain. Ridley fails to teach means for transversely positioning the edge guides thereby adjusting the curtain width. However, Kamitani teaches the curtain coating apparatus which is comprised of the following: a hopper defining a distribution chamber extending transversely of the direction, a flow face extending generally in and transverse to the web-travel direction, a slot extending between the chamber and the flow face and elongated transversely of the direction; means for supplying the coating liquid to the chamber, thence through the slot to the flow face, and thence along the flow face and for dropping the liquid as a transversely extending and downwardly flowing curtain from an edge of the flow face onto the web; and guide members 14,17 for providing the desired width of coating to be applied. Kamitani teaches that guide members 14 are movable along the width of the coating hopper. Kamitani also teaches width of the curtain is controlled or regulated by guide members 17 which are known in the art to be adjustable. Kamitani teaches in an alternate embodiment as shown in Figure 10 a means for adjusting the width adjustable guide

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means 14 (element 54). Therefore, it would have been obvious to modify Ridley apparatus by arranging its edge guides such they are transversely adjustable on the flow face of the hopper and are moved by a means for transversely positioning the edge guides since Kamitani teaches as shown in Figure 9 transversely positioning or adjusting the width of upper guide member lying on the flow face of the curtain coating hopper to control the width of the curtain applied to the substrate and teaches in an alternate embodiment as shown in Figure 10 a means for transversely adjusting width adjustable guide members for the obvious reason of greater control of the width of curtain of coating applied to the substrate. With respect to claim 14, Ridley teaches the flow-face edge is curved and fits with the upper guide element. With respect to claim 15, Ridley teaches the flow face inclines downward from the slot to the edge.

Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ridley 4,135,477 in view Kamitani 6,146,708 and Watanabe 6,423,144 .

Ridley and Kamitani are applied for the reasons noted above but each fails to teach a supply passage opening generally centrally into the chamber. However, it would have been obvious to modify the Ridley curtain coating apparatus by arranging its supply passage and supply means such that it opens centrally into the chamber such as shown by Watanabe for the obvious advantage of uniform distribution of coating to the chamber. Thus claim 16 is obvious over the above cited references. With respect to claim 17, Watanabe teaches a pair of inserts which blocks the slot and coating chamber and a means for transversely displacing the inserts. Therefore, it would have been obvious given the Ridley apparatus as discussed to provide insert assemblies

such as disclosed by Watanabe for controlling the width of material flowed from the slot of the Ridley nozzle or hopper for the obvious advantage of reducing the amount of coating need to fill the coating head by adjusting the void volume of the combination of the chamber and slot.

Claims 16-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ridley 4,135,477 in view Kamitani 6,146,708 and Maejima 4,659,302.

Ridley and Kamitani are applied for the reasons noted above but each fails to teach a supply passage opening generally centrally into the chamber. However, it would have been obvious to modify the Ridley curtain coating die apparatus by arranging its supply passage and supply means such that it opens centrally into the chamber such as shown by Maejima for the obvious advantage of uniform distribution of coating to the chamber. Thus claim 16 is obvious over the above cited references. With respect to claim 17, Maejima teaches a pair of inserts which blocks the slot and coating chamber as shown in Figure 3 and a means for transversely displacing the inserts as shown in Figure 1. Therefore, it would have been obvious given the Ridley apparatus as discussed to provide insert assemblies such as disclosed by Maejima for controlling the width of material flowed from the slot of the Ridley nozzle or hopper for the obvious advantage of reducing the amount of coating need to fill the coating head by adjusting the void volume of the combination of the chamber and slot.

Claims 10-13 and 18-20 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brenda A. Lamb whose telephone number is (571) 272-1231. The examiner can normally be reached on Monday-Tuesday and Thursday. The examiner can also be reached on alternate Wednesdays and Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nadine Norton, can be reached on (571) 272-1231. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Brenda A Lamb
Primary Examiner
Art Unit 1792

/Brenda A Lamb/

Primary Examiner, Art Unit 1792